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Cc: 'Chris.Lamie@erg.com'[Chris.Lamie@erg.com]

From: Jeremy Fisher

Sent: Tue 5/5/2015 8:48:19 PM **Subject:** AVERT Caveats for DSMore

Robyn,

I would classify the following caveats for DSMore as the primary areas of consideration:

- a) Snapshot analysis: DSMore seeks to look at a multi-year energy efficiency programs, reviewing changes in electricity market prices and even weather over time. AVERT is fundamentally a snapshot tool, reviewing avoided generation and emissions from dispatch patterns in the last year. To the extent that DSMore relies on changing patterns of use, changing economic forces, electricity system prices, fuel prices, and weather patterns over time, AVERT's core considerations may be inconsistent, particularly over longer periods of time.
- b) Limited resolution: AVERT was designed to review the emissions impacts of fairly large state and regional EE/RE programs and initiatives. AVERT has a limited resolution for programs that are small relative to the total size of regional fossil generation. To the extent that DSMore is designed to review individual energy efficiency programs, the impact of these individual programs alone may differ substantively from the impact of aggregate programs and measures. In some circumstances, the use of AVERT to review the emissions impacts of individual small EE/RE programs may significantly over- or under-estimate emissions impacts relative to the evaluation of those programs in the presence of other regional programs. For example, a small peak-targeting DSM program may show significant NOx savings per MWh due to the assumed reduction of peaking units. However, a large cohort of peak-targeting DSM programs may have a smaller impact on a per MWh basis because the reduction of peaking EGUs represents a smaller fraction of displaced generation.
- c) Precision of results: AVERT reports results rounded to the nearest hundred units. Users should consider the number of significant figures input and output from AVERT.
- d) Location non-specificity: AVERT does not differentiate the location of EE/RE programs within the bounds of large, multi-state regions. Therefore EE/RE at the center or edges of a region will have the same outcome in AVERT. To the extent that DSMore reviews DSM costs and benefits at a location-specific basis, this information may be inconsistent with AVERT's regional nature.
- e) Limited capture of individual EGU dynamics: AVERT, at its core, does review unit specific reductions, but EPA does not recommend evaluating the outcome of an analysis at a unit-specific level.

I don't think that DSMore needs to specifically use this language, but it should be pretty clear about these points.

Sorry for the delay

-Jeremy